

LIFSHITS, E.L.

USSR/Cultivated Plants - General Problems.

Abs Jour : Ref Zhar - Biol., No 10, 1958, 43991

Author : Lifshits, E.L.

Inst : Central Asian Scientific Research Institute for Irrigation.

Title : The Ameliorating Effect of Grassfield Crop Rotation on
the Salt-Contaminated Soils in the Golodnaya Steppe.

Orig Pub : V sb.: Vopr. melioratsii Golodnoy stepi. Tashkent, 1957,
165-235.

Abstract : A several years' experiment on the ameliorating effect of
the grass field crop rotation to lower the soil salinity,
the structure of the soil and its physical water properties
was started in 1946 at the Central Experimental Melio-
rative Station of the Central Asiatic Natural History

Card 1/3

CHULANOV, B. I., dotsent; LIFSHITS, E. M. (Irkutsk)

Case of foreign bodies in the appendix. Klin. med. no. 6:142-144
'61. (MIRA 14:12)

1. Iz kafedry gospital'noy khirurgii (zav. - prof. E. T. Senchillo-Yaverbaum) Irkutskogo meditsinskogo instituta (dir. - prof. A. I. Nikitin)

(APPENDIX--FOREIGN BODIES)

KISEL'GOF, M.L., kand. tekhn. nauk; CHELISHCHEV, N.V., inzh.; LESHITS,
E.V., inzh.

Study of the crushability of fuels in hammer mills. Teplotekhnika i energetika 12 no.7:35-41 Jl '65. (MIR' 18:7)

1. Vsesoyuznyy teplotekhnicheskiy im. titut.

LITOVCHEJKO, O.V., kand. med. nauk; LIFSHITS, F.B., kand. med. nauk

Course of disseminated forms of cutaneous tuberculosis.
Vest. derm. i ven. 38 no.3:29-34 Ag '64. (MERA 18:8)

1. Kozhnoye otdeleniye (rukoveditel' - kand. med. nauk I.N. Agapkin) i podrostkovoye otdeleniye (rukoveditel' - doktor med. nauk M.D. Rozanova) Moskovskogo nauchno-issledovatel'skogo instituta tuberkuleza (dir.- kand. med. nauk T.P. Mochaleva, zamestite'l' direktor po nauchnoy chasti - prof. D.D. Asseyev)
Ministerstva zdravookhraneniya RSFSR.

LIFSHITS, I.B.

Differential diagnosis of pneumosclerosis. Sov.med. 22 no.3:54-59
(MIRA 11:4)
Mr '58.

1. Iz terapeuticheskogo otdeleniya (zav. - prof. I.I.Berlin)
Moskovskogo nauchno-issledovatel'skogo instituta tuberkuleza
Ministerstva zdravookhraneniya RSFSR (dir. - kandidat meditsin-
skikh nauk V.F.Ghernyshev)

(LUNG DISEASES, differ. diag.
nonspecific pneumosclerosis, from tuberc. (Rus))
(TUBERCULOSIS, PULMONARY, pathol.
pneumosclerosis, differ. diag. from nonspecific dis.
(Rus))

GAVRILENKO, V.S., kand. med. nauk; KOSOVA, N.Ya., kand. med. nauk;
LIFSHITS, F.B., kand. med. nauk

Experience with the use of ethoxyd in the compound treatment
of pulmonary tuberculosis. Probl. tub. 41 no.5:45-49 '63.
(MIRA 17:1)

1. Iz Moskovskogo nauchno-issledovatel'skogo instituta
tuberkuleza (dir. - kand. med. nauk Mochalova, T.P.,
zamestitel' direktora po nauchnoy chasti - prof. D.D. Aseyev)
Ministerstva zdravookhraneniya RSFSR.

KOSOVA, N.Ya.; LIFSHITS, F.B.; SIDORKINA, Ye.S.

Bronchopulmonary disorders in adolescents in primary tuberculosis.
Probl. tub. 42 no.10:41-46 '64. (MIRA 18:11)

1. Moskovskiy nauchno-issledovatel'skiy institut tuberkuleza
(direktor - kand. med. nauk T.P. Mochalova; zamestitel' direktor
po nauchnoy chasti - prof. D.D. Aseyev) Ministerstva
zdravookhraneniya RSFSR.

MAYYER, N.A. [Maer, M.A.]; ERIMAN, A.A.; LIFSHITS, F.Z. [Lifshyts, F.Z.];
OL'DEKOP, Yu.A. [Al'dekop, IU.A.]

Decomposition of phenyl acetate of mercury oxide in solvents.
Vestsi AN BSSR Ser. fiz.-tekhn. nav. no.1:49-54 '64
(MIRA 17:7)

SATANOVSKIY, L.G.; LIFSHITS, G.B.

Standardizing low-pressure burners with air atomizing.
Kuz.-shtam. proizv. 5 no.9:34-35 S '63. (MIRA 16:11)

LIFSHITS, G.B.

Achievements of the Crimean Province Scientific Society of
Anatomists, Histologists and Embryologists. Arkh. anat. i embr.
32 no.4:107 O-D '55 (MLRA 9:5)

(CRIMEA--ANATOMY)

USSR / Human and Animal Morphology (Normal and Pathological).
Muscles.

S

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 2980

Author : Lifshits, G. B.
Inst : Crimean Medical Institute
Title : Blood Supply and Innervation of Superficial Cervical
Muscles and Their Clinical Significance

Orig Pub : Tr. Krymsk. med. in-ta, 1957, 18, 459-466

Abstract : On 1220 muscles (M) of the neck of 75 human cadavers
of both sexes and various ages (from 4½-month fetuses
to 60 years), it was demonstrated that about 2-9
arterial and nerve branches penetrate each M. All the
studied M have several sources of blood supply and one
or several sources of innervation. Both the arteries
and the nerves of adjacent M usually anastomose between
themselves. In each M there are main and accessory

Card 1/2

46

LIFSHITS, G.B., dots. (Simferopol')

Vascularization and innervation of the neck muscles and their
clinical significance. Vrach.delo no.1:55-57 Ja '58. (MIRA 11:3)

1. Katedra topograficheskoy anatomi i operativnoy khirurgii (zav.-
prof. V.M.Totskiy) Krymskogo meditsinskogo instituta.
(NECK)

LIFSHITS, G.B.; BRUSILOVSKIY, I.A.; PETROVSKIY, I.N. (Simferopol¹)

Use of Donetskii's rings in salpingostomatoxy. Eksper.
khir. 4 no.4:46 Jl-Ag '59. (MIRA 12:11)
(FALLOPIAN TUBES surg)

LIFSHITS, G. I.

1964

DECEASED

c. '63

Refrigerated
warehouse

LIFSHITS, Q.M.

Probability Statement of the terrorist attack: ~~IMO~~ 1
KGB-KGB and LNO-AK-40 (C. M. Litvinov,
L.S. Litvinov, U.S.S.R. AS 220-3001650 (initial transla-
tion). - See C.I. 50.01276. R.M.B.

1 3

R.M.
mt

*Lifshits, G. M.**503*

Fusibility diagrams of the ternary systems: KNO₃-KCl-KBr and AgNO₃-AgCl-AgBr. G. M. Lifshits (U.S.S.R. Academy of Sciences, Institute of Crystallography, Zher. Osnovy Khim. 23, 314-20 (1955).—The binary system KNO₃-KCl has a eutectic point (KNO₃ + KCl-KO) at 320° (0% KCl) and a transition point (KCl + KBr-KNO₃) at 301° (17.4% KCl). The system KNO₃-KBr has a eutectic point ((KNO₃ + KBr-KNO₃) at 305° (0.7% KBr) and a transition point (KBr + KBr-KNO₃) at 342° (14.8% KBr). The system KCl-KBr is characterized by solid solns. with a min. m.p. at 734° (40% KCl). KCl-KNO₃ and KBr-KNO₃ form solid solns. in the ternary system. The situation is paralleled in the Ag systems. In the AgNO₃-AgCl system there is a eutectic point (AgNO₃ + AgNO₃-AgCl) at 170° (18.5% AgCl) and a transition point (AgCl + AgNO₃-AgCl) at 200° (31% AgCl). In the AgNO₃-AgBr system the eutectic point (AgNO₃ + AgNO₃-AgBr) is at 165° (78% AgNO₃) and the transition point (AgBr + AgNO₃-AgBr) is at 188° (64.5% AgNO₃). The AgCl-AgBr system is characterized by solid solns. with a min. m.p. of 415.5° (74.1% AgBr). The double salts AgNO₃-AgCl and AgNO₃-AgBr form solid solns. A phase change occurs in the AgNO₃ field at the 159° isotherm. C. H. F.

"APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929910002-9

L. F. SHITS, G. M.

Irreversibly precipitated systems of regular type with
stratification of the chlorides and nitrates of potassium and
silver, and of the bromides and nitrates of potassium and
silver. G. M. Lifshits. *J. Gen. Chem. U.S.S.R.* 26, 142
(1956) (Engl. translation). See C.A. 50, 11705. B.M.R.

APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929910002-9"

Lifshits, 8-91

✓ Irreversibly recrystallization of a singular type with
disintegration of the chlorides and nitrates of potassium and
silver and of the silver halides and formation of potassium and
silver sulfide. The system is characterized by the presence of
two invariant points and two invariant lines. The invariant
points are: E₁, AgCl 23.30; AgNO 37.77; AgCl 23.30;
AgNO + AgNO₃; KNO₃ + AgNO₃; AgCl 23.30;
KCl + AgCl. P₁: 121°; AgNO 27°; KNO₃ 42°; AgCl
40°; AgNO-KNO₃ + AgNO-AgCl + AgCl. P₂:
37.77; KNO₃ 31.0; AgCl 23.30; E₂: 15.4; KNO₃; KCl + KCl
+ AgCl. In the system K₂AgBr₃-NO₃ the invariant
points are: E₁, 119°; AgNO 61.10; KNO₃ 37.00; AgBr
1.00; AgNO₃ + AgNO₃; KNO₃ + AgNO₃; AgBr₃. E₂:
32.22%; KNO₃ 39.50; AgBr 0.10; KBr 0.40; KNO₃ + KNO₃
KBr + AgBr₃. P₁: 127°; AgNO 37.77; KNO₃ 40.41;
AgBr₃ 1.84%; AgNO-KNO₃ + AgNO-AgBr₃ + AgBr₃.
P₂: 32.22%; KNO₃ 39.50; AgBr 0.10; KBr 0.40; KNO₃
KBr + AgBr₃. In each case mixing of the AgNO₃
with the K₂AgBr₃ is accompanied by a strongly exothermic
reaction to form the Ag halide. At temps. above the n.p.
of the latter the system stratifies into two liquid layers.

C. H. Burkman

Lifshits, G.M.

USSR/Physical Chemistry, Thermodynamics, Thermochemistry,
Equilibria, Phys-Chem. Anal, Phase-transitions.

B-8

Abs Jour : Ref Zhur - Khimiya, No 7, 1957, 22330.

Author : G. M. Lifshits.

Inst : Not given

Title : Irreversible mutual systems of singular type with stratification of potassium and silver chlorides, nitrates and of potassium and silver bromides, nitrates.

Orig Pub : Zh. obshch. khimii, 1956, 27, No 1, 20-26.

Abstract : Diagram of fusibility of K, Ag Cl, NO₃ system studied by polythermic method includes seven crystallization fields, 4 components and 3 components: AgCl, KCl, AgNO₃, KNO₃, AgNO₃ · AgCl, AgNO₃ · KNO₃, KNO₃ · KCl. The components KNO₃ and AgCl do not mix completely in a molten state, and it continues to be so in the ternary system also. The stratification area occupies 52% of the mutual system's square area, superimposing chiefly the AgCl crystallization field and partially that of KCl, "Connoda" corresponding to the highest crystallization temperature coincides with the diagonal KNO₃-AgCl. Non variant points of the system: eutectic at 113° and 315°, transitional at 122° and

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-116-

-117-

LIFSHITS, G.S., inzh.

Results of the consumption of fuel on regional thermal electric power plants in 1960. Energetik 9 no.10:9-11 O '61. (MIRA 14:10)
(Electric power plants) (Fuel)

GERSAMIYA, Ya.; LIFSHITS, I.

A distinguished miner. Sov.shakht. 11 no.11:12 II '62.
(MIRA 15:11)

(Georgia—Coal miners)

LIFSHITS, G.V.

Case of a combination of lymphoid leukemia and cancer of the
liver. Trudy Inst. im. N.V. Sklif. 5 no.2;238-241 '62.
(MIRA 18:6)

Lifshits, I.B.
PROGNIMAK,D.Ya., gornyy inzhener; TARANOV,P.Ya., dotsent, kandidat
tekhnicheskikh nauk; LIFSHITS, I.B.; GEYFER,V.G., professor

Remarks on IU.I. Levitskii's article: "Pressing problems of the
coal industry". Ugol' 30 no.4:40-42 ap '55. (MLRA 8:6)

1. DonUGI (for Prognimak) 2. Donetskij industrial'nyy institut
(for Taranov) 3. Nachal'nik planovogo otdela shakhty No.42
"Kapital'naya" tresta Kopeyskugol' (for Lifshits).

"APPROVED FOR RELEASE: 07/12/2001

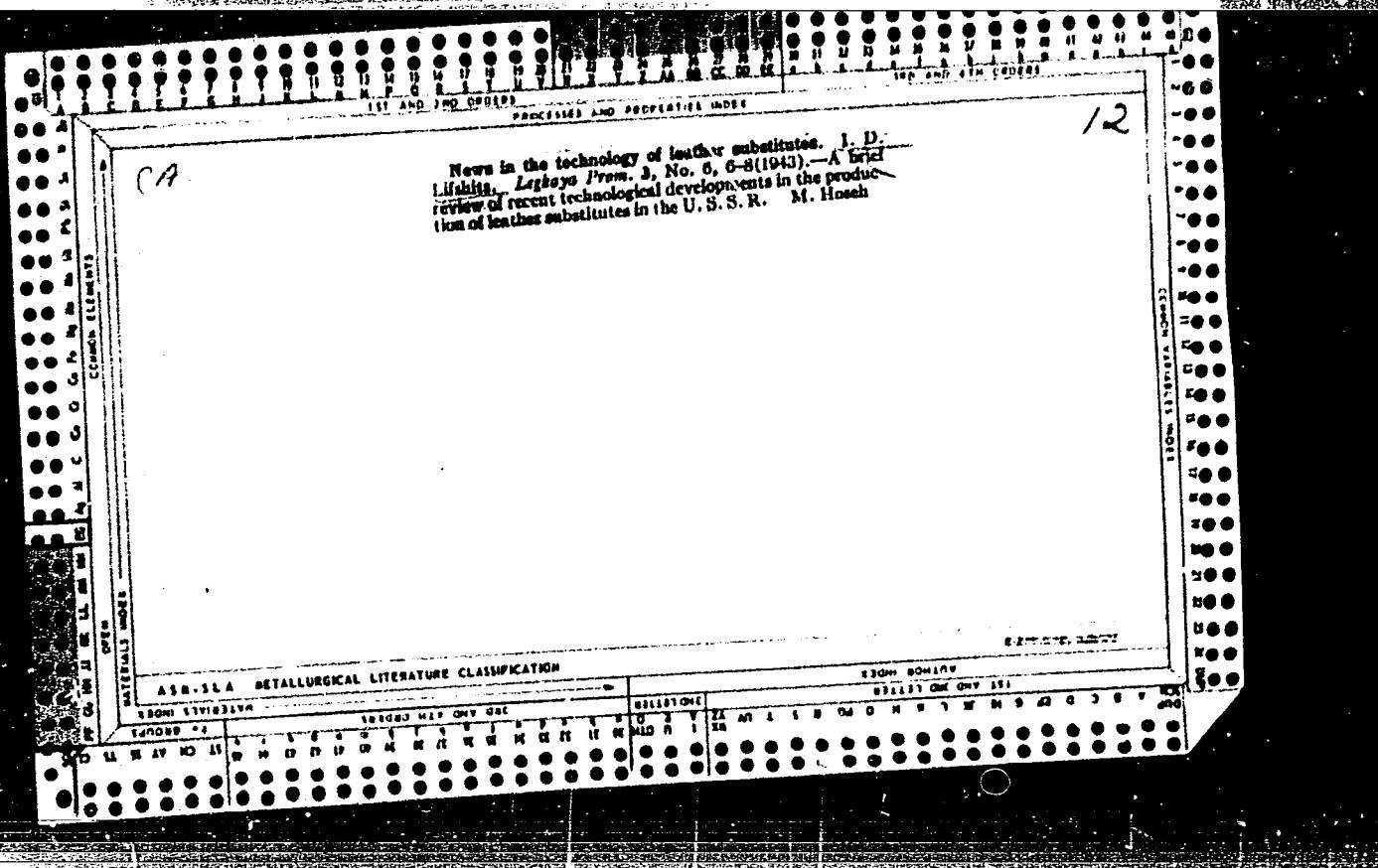
CIA-RDP86-00513R000929910002-9

KHOROSHAYA, Ye.S.; KOVRICINA, G.I.; LIFSHITS, I.D.; ZAYONCHKOVSKIY, A.D.

Photometric rapid method for determining the degree of readiness
of poly(vinyl chloride) films in the process of plasticization on
rolls. Plast.massy no.5:59-60 '62. (MIRA 15:4)
(Vinyl compound polymers) (Plasticization)

APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929910002-9"



"APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929910002-9

LIFSHITS, I.D., glavnnyy inzhener.

Development of leather substitutes industry. Leg.prom. 7 no.11:13-15 N 147.
(MIRA 6:11)

1. Glavkozhzamenitel' Ministerstva legkoy promyshlennosti.
(Leather substitutes)

APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929910002-9"

L. J. C. L.

Ende Polymers in General

L. J. C. L.

Synthetic latexes in the production of leather
substitutes. I. I. KUSTYNNKOVA and I. D. LESNIKOV
Tekhnika Promst, 1960, No. 1, 26; *Translated Content*
Lists of Russian Periodicals, 1960, No. 13, 33.
38610.026X21

1450

LIFSHITS, I.D.

Leather, Artificial

Extend the utilization of waste products,
Leg. prom. 12 No. 4, 1952

Monthly List of Russian Accessions, Library of
Congress, July 1952. Unclassified.

LIFSHITS, I.D., kandidat tekhnicheskikh nauk; VISHNYAKOVA, L.N., inzhener.

Improving technical and economic indexes for artificial
leather. Leg.prom. 15 no.6:9-12 Je '55. (MLRA 8:8)
(Leather, Artificial)

LIFSHITZ, I. D.

LEV, M.V., inzhener; SHUBALOVA, L.S., kandidat tehnicheskikh nauk;
LYUBICH, A.B., kandidat tehnicheskikh nauk; SHUBALOVA, L.S., inzhener.

Making stiff-tube cores without use of fabrics. Leg.prom. 17
no. 764(4) J1 "S"
(Stiffening), (Plastics)

LIFSHITS, I. D.

KOPYL, A.N.; LIFSHITS, I.D.; SHUVALOVA, L.S.

Making patent leather by coating flesh layers with polyvinyl chloride
varnish. Leg. prom. 18 no.1:20-21 Ja '58. (MIRA 11:2)
(Leather industry) (Vinyl polymers)

BARKAN, Mikhail Sergeevich; KOSTRYUKOVA, Lidiya Ivanovna; VOYUTSKIY,
S.S., prof., doktor khim.nauk, retsenzent; LIYSHITS, I.D., kand.
tekhn.nauk, retsenzent; MINAYEVA, T.M., red.; KHAKHIN, M.T.,
tekhn.red.

[Use of leather fibers in manufacturing cardboard for shoes]
Primenenie kozhevennogo volokna v proizvodstve obuvnykh kartonov.
moskva, Gos.nauchno-tekhn.izd-vo legkoi promyshl., 1959. 129 p.
(MIRA 12:12)

(Leather substitutes) (Shoe manufacture)

LIFSHITS, I.D.; SHUVALOVA, L.S.; V rabote prini mala uch stiye; BAKUTIAROVA,
Ye.P.

Artificial leather with a stitched nonwoven base. Kozh.-obuv.
pr.m. 2 no.8:24-26 Ag '60. (MIRA 13;9)
(Leather, Artificial)

LIFSHITS, I. D.; KOPYL, A. N.; ALYAUTDINOV, A. O.; SHUVALOVA, L. S.;
KOMAROVA, Z. V.

Footwear made with polymer materials. Kozh. obuv. prom. 4
no.10:17-19 0 '62. (MIRA 15:10)

(Boots and shoes) (Plastics)

KIPNIS, B.Ya.; KOLESNIKOV, V.N.; LERNER, D.V.; MINAYEV, S.M.;
PANOVA, A.V.; LIFSHITS, I.D., *tekhn. nauk,*
retsenzent; MIKHAYLOV, V.A., *inzh.*, red.; PLEMYANNIKOV,
M.N., red.; BATYREVA, G.G., *tekhn. red.*

[Handbook on the manufacture of artificial leather] Spra-
vochnik po proizvodstvu iskusstvennoi kozhi. Moskva, GIZ-
legprom. Vol.1. 1963. 523 p. (MIRA 16:12)
(Leather, Artificial)

"APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929910002-9

BERNSHTEYN, M.Kh.; YABKO, Ya.M.; BAKHTIAROVA, Ye.R.; SHUVALOVA, L.S.;
ZAYONCHKOVSKIY, A.D.; LIFSHITS, I.D.; GRINYUK, V.G.

Utilization of cotton manufacture wastes for the production
of "IK" artificial leather. Kozh.-obuv. prom. 5 no.6:25-28
Je '63. (MIRA 16:6)

(Leather, Artificial)

APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929910002-9"

L 15341-66 EWT(n)/EWP(j)/T/ETC(m)-6 WW/RM

ACC NR: AP6000972

(N)

SOURCE CODE: UR/0286/65/000/022/0056/0056

AUTHORS: Rotenberg, I. P.; Shcherbina, I. V.; Lifshits, I. D.; Shuvalova, L. S.

ORG: none

TITLE: A method for obtaining foam plastic. Class 39, No. 176390 /announced by
Vladimir Scientific Research Institute for Synthetic Resins (Vladimirskiy nauchno-
issledovatel'skiy institut sinteticheskikh smol)/

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 22, 1965, 56

TOPIC TAGS: polymer, resin, plastic, polyvinyl chloride, foam plastic, vinyl, plastic,
plasticizerABSTRACT: This Author Certificate presents a method for obtaining foam plastics (by a
noncompression method) on the basis of polyvinylchloride combined with an elastomer, in
the presence of a plasticizer and with aid of a gas generator. To improve the
properties of the foam plastic and to increase its resistance to frost, the elastomer
consists of chlorosulfonated polyethylene. The proportion of elastomer to polyvinyl-
chloride is 5 to 25 wt parts per 100 wt parts respectively.

SUB CODE: 11/ SUBM DATE: 23Dec63

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Card 1/1

UDC: 678.743.22-134.22

"APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929910002-9

BAKHTEYEV, M.K.; LIFSHITS, I.F.; POPOV, V.S.; STROGANOV, A.N.

Age of intrusive rocks in the southern part of the Terektau
synclinorium (central Kazakhstan). Vest. Mosk. un. Ser. 4:
Geol. 20 no.4:39-46 Jl-Ag '65. (MIRA 18:9)

1. Kafedra istoricheskoy i regional'noy geologii Moskovskogo
universiteta.

APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929910002-9"

LIVSHITS, I. G.

"Intracranial Hemorrhages in Newborn Infants." Sub 13 Nov 51,
Central Inst for the Advanced Training of Physicians.

Dissertations presented for science and engineering degrees in
Moscow during 1951.

SO: Sum. No. 480, 9 May 55

LIFSHITS, I. G.

Pneumonia

Certain peculiarities in the onset of pneumonia in children in a large populated place in the Southern Urals. I. G. Lifshits and others. Vop. pediat. i okhr. mat. i det, 19, no. 6, 1951.

Monthly List of Russian Accessions, Library of Congress, April 1952. Unclassified

LIFSHITS, Isaak Grigor'evich, prepodavatel'; KHITROV, Vyacheslav
Grigor'yevich, prepodavatel'; YEVETUSHENKO, Aleksey
Ivanovich, prepodavatel'; KOPELYANSKIY, G.D., otv.red.;
PETRAKOVA, Ye.P., red.izd-va; SABITOV, A., tekhn.red.

[Building materials, constructions and parts] Stroitel'nye
materialy, izdelia i detali. Moskva, Ugletekhizdat, 1959.
222 p. (MIRA 12:11)

1. Rostovskiy-na-Donu gornostroitel'nyy tekhnikum.
(Building materials) (Concrete construction)

LIFSHITS, I. [Lifshyts', I.]; KAGANOV, M. [Kahanov, M.], doktor fiz.-
matem.nauk (Khar'kov)

Quantum mechanics and solids. Nauka i zhyttia 12 no.4:21-23
(MIRA 15:8)
Ap '62.

1. Chlen-korrespondent AN SSSR i AN UkrSSR.
(Wave mechanics) (Solids)

LIFSHITS, I. I.

20 77-342-718-652-
Causes in the Reduction of the Sensitizing Action of Dyes by Non-Dissociating
Colour Couplers. S. V. NATALSON, I. I. LIFSHITZ and E. B. LEVKOV. Zhurnal
Nauchnoi i Tekhnicheskoi Fotografii [Scientific and Technical Photography], 1956, 7, 174-182.—The
decrease in sensitizing action brought about by the addition of a substantive
colour former to an emulsion sensitized to the red end of the spectrum is
attributed to the desorption of the dye by the colour former, this property of
desorbing the dye being limited with the presence of a high molecular weight
aliphatic chain in the colour former molecule. Different dyes are affected to
different extents and this aspect is considered in relation to the structural formula
of the dye although no correlation is made. The effect of gelatin in the system was
found to result in a speeding up of the desorption. A shift in the peak of the
absorption of the sensitizing due to the colour former was also found, but no
explanation offered.
R.P.W.W.

3

am
KLL

LIFCHITS, I. I.

Machine -shop budget for mass and assembly line production in the metal working industry. Khar'kov, Gos. republikanskoe ob'edinenie metalloobrabatyvaiushchei b promyshl. Ukrainsk, 1930. 271 p. (50-45434)

TJ1135. L5

LINSHITS, I.I., inzhener.

Precise self-centering devices of resilient material. [Izd]
LONITOMASH 24:129-162 '51. (MIRA 8:2)

1. NII Mintransmash.
(Machine tools--Accessories and attachments)(Plastics)

LIFSHITS, I. I.
Min Higher Education USSR. Leningrad Polytechnic Inst imeni M. I. Kalinin

LIFSHITS, I. I.- "Investigation of self-centering tools with hydraulic chucks."
Min Higher Education USSR. Leningrad Polytechnic Inst imeni M. I. Kalinin.
Leningrad, 1956
(Dissertation for the Degree of Candidate in Technical Sciences.)

SO: Knizhnaya Letopis' No. 13, 1956.

VUL'F, Adol'f Matveyevich; RUDNIK, S.S., prof., retsenzent; LIFSHITS, I.I.,
red., kand. tekhn. nauk; LIVKINA, T.L., red. izd-va; SOKOLOVA, L.V.,
tekhn. red.

[Metal cutting with ceramic tools] Rezanie metallov mineralokerami-
cheskimi reztsami. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit.
lit-ry, 1958. 182 p. (MIRA 11:10)

(Cutting tools)

S/032/60/026/06/31/044
B010/B016

AUTHORS: Pavlov, P. A., Paromenskiy, A. A., Lifshits, I. I.

TITLE: Device ²⁰ for a Simultaneous Test of Cyclic Torsion and Constant Stretching ²⁰

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 6, pp. 762-764

TEXT: A device is described (Fig. 1) which is able to produce in tube samples an alternating moment up to 2500 kgm, with simultaneous constant tensile stress up to 20 tons. To produce the torsional moment, the device with the sample is placed in a common pulsator (e.g. of the Armavirskiy zavod (Armavir Plant)), which is applicable to transverse-fatigue tests at a load up to 50 tons. The sample is fastened by means of two connecting pieces to the mobile holder of the pulsator. Contact loads are formed during the test on two points which are antisymmetric to the axis of the sample and thus produce a torsional moment. The tensile stress of the sample is performed by means of a hydraulic apparatus which contains two pressure cylinders. The quantity of the tensile load is determined

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Device for a Simultaneous Test of Cyclic
Torsion and Constant Stretching

S/032/60/026/06/31/044
B010/B016

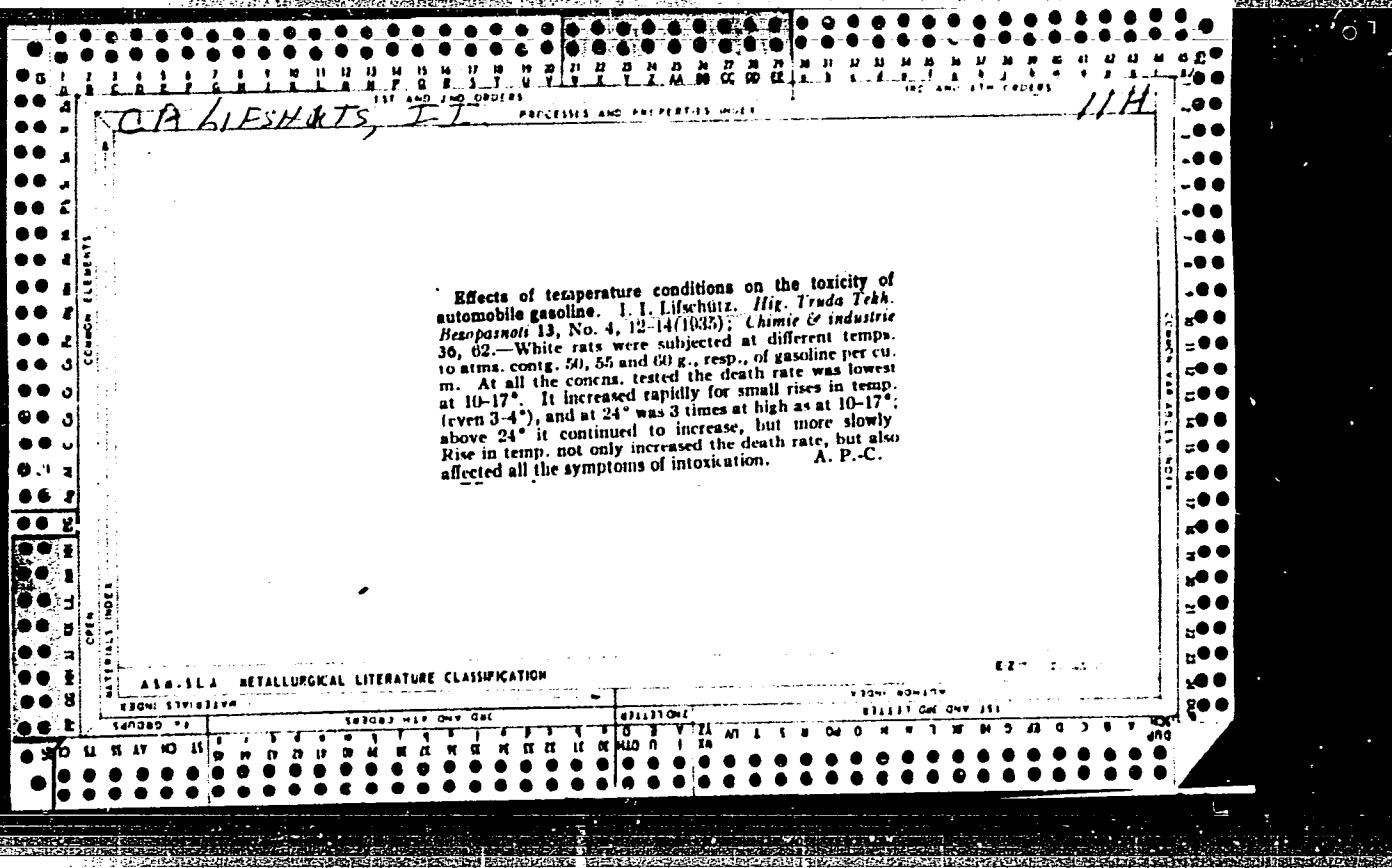
from the mean pressure in these cylinders by means of pressure gauges.
There is 1 figure.

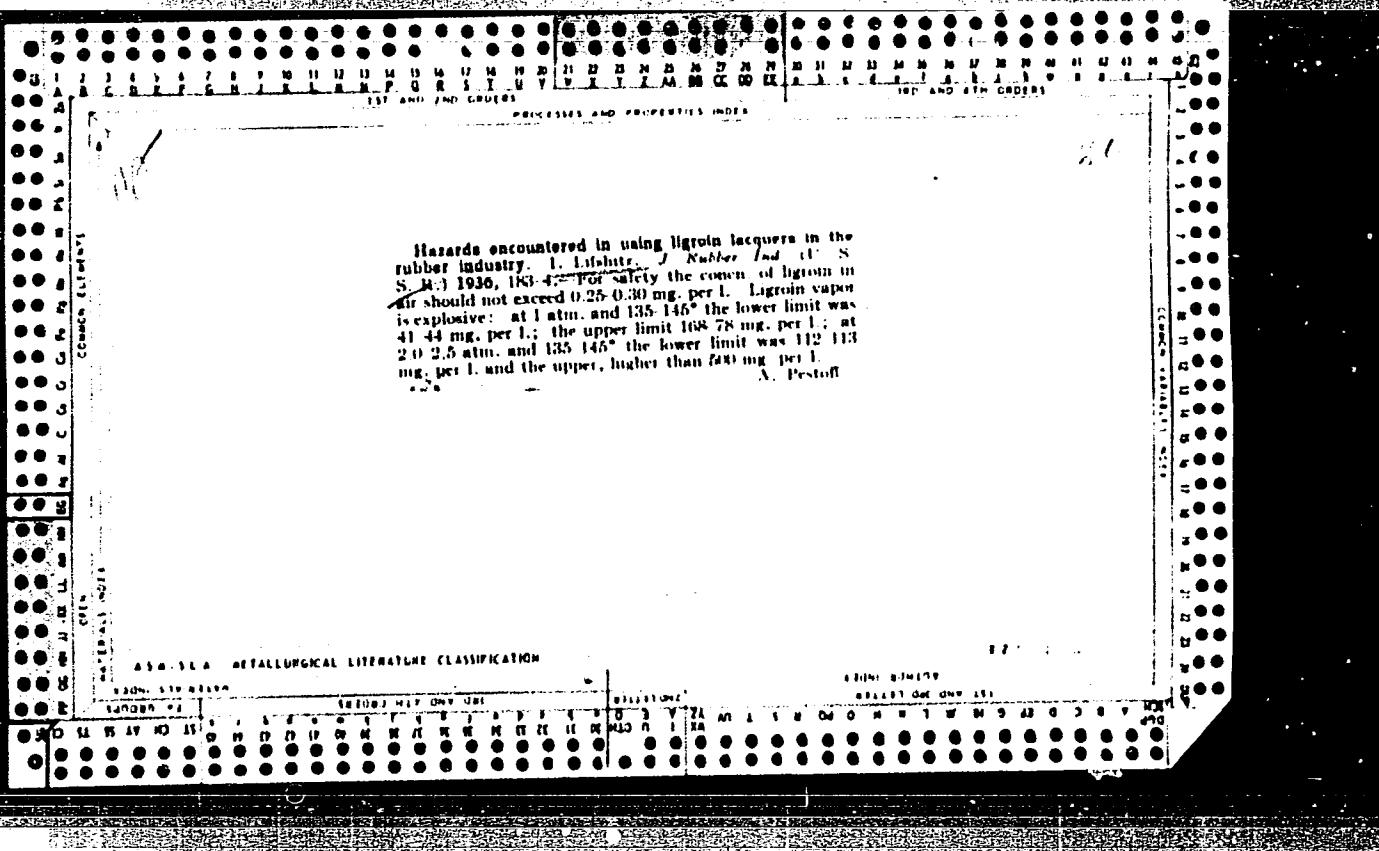
ASSOCIATION: Leningradskiy politekhnicheskiy institut im. M. I. Kalinina
(Leningrad Polytechnic Institute imeni M. I. Kalinin)

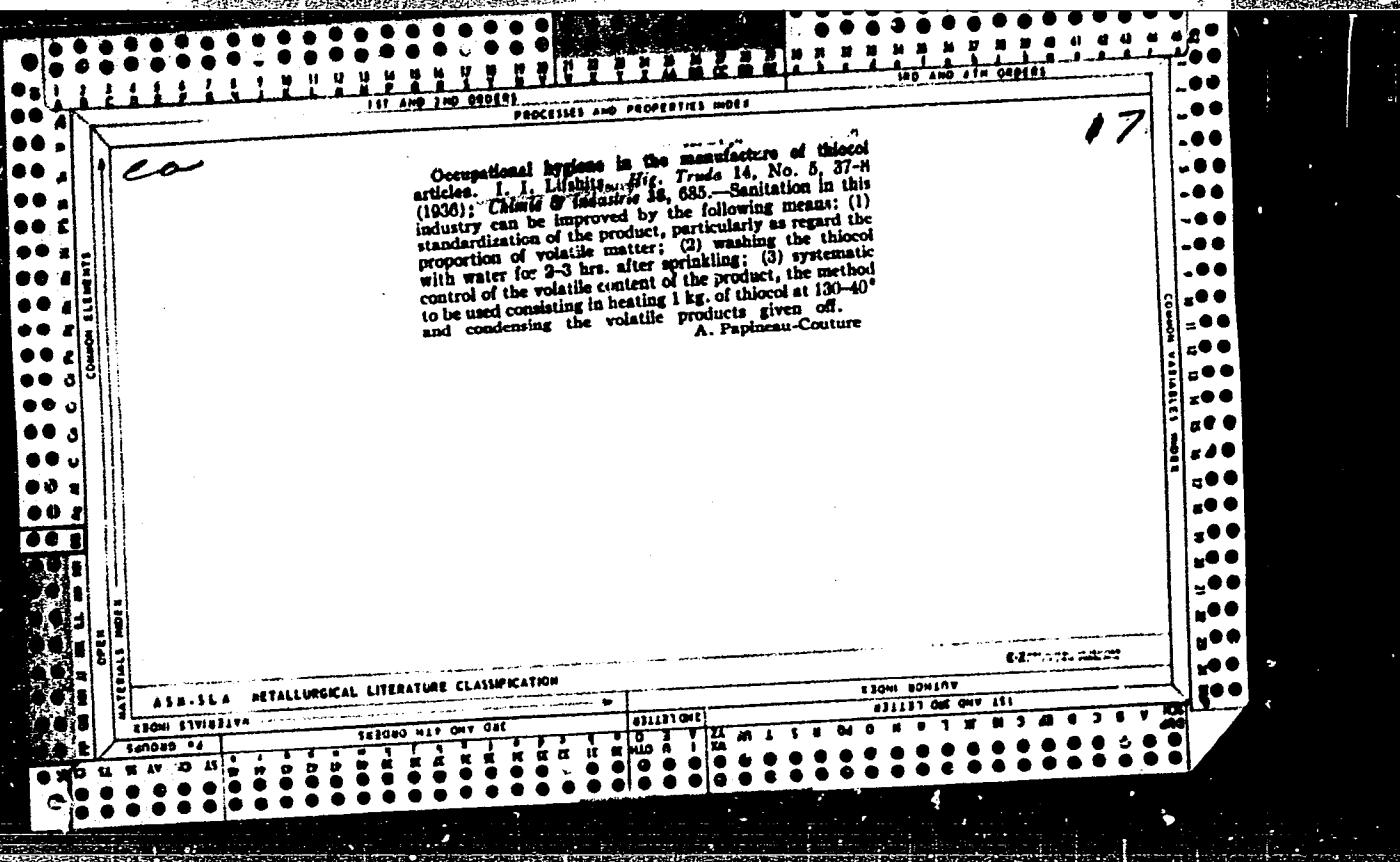
Card 2/2

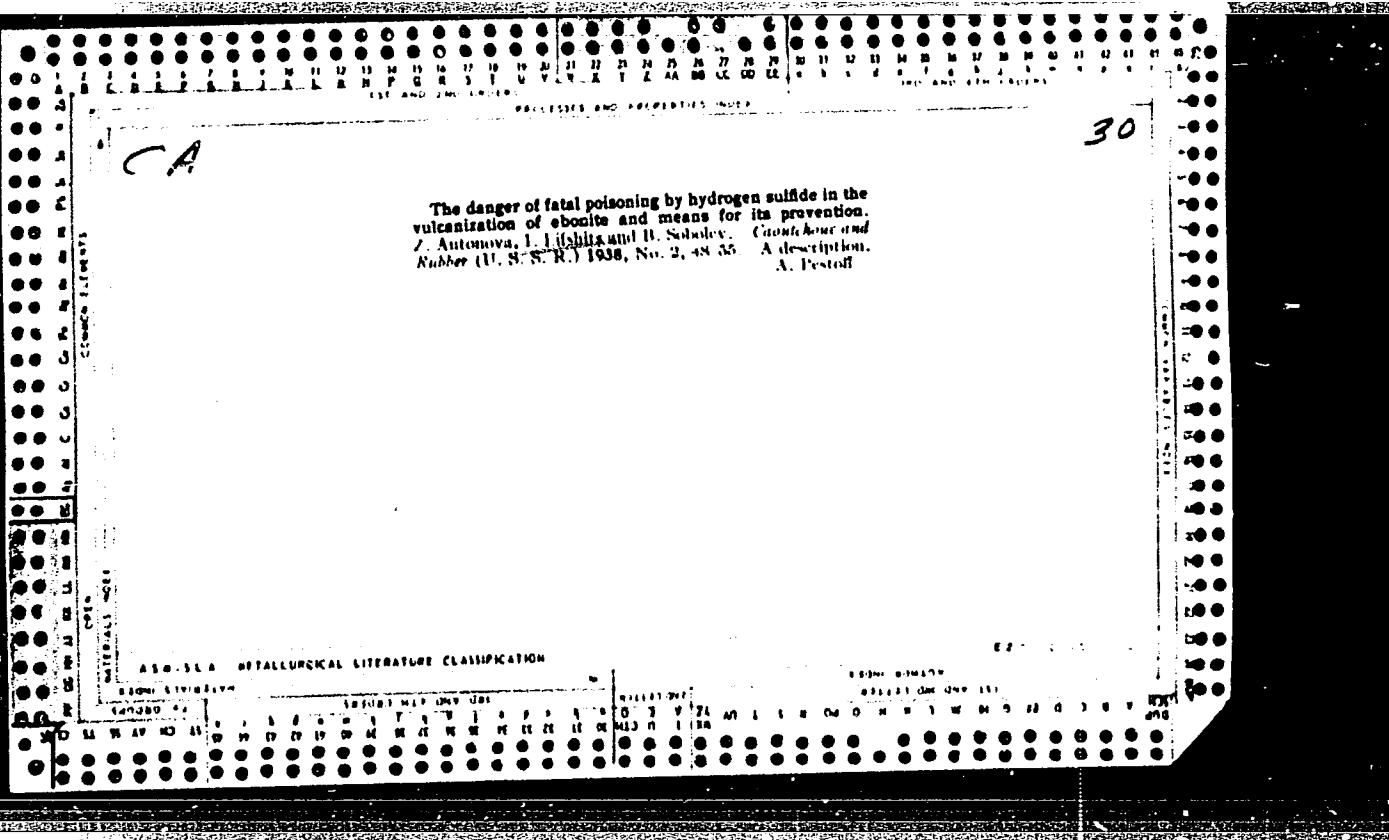
VUL'F, A.M.; PODPORKIN, V.G., prof., doktor tekhn. nauk, retsenzent;
~~LIFSHITS, I.I.~~, kand. tekhn. nauk, red.; KUREPIN, G.N.,
red.izd-va; BYERANSKAYA, O.V., tekhn. red.

[Metal cutting] Rezanie metallov. Moskva, Mashgiz, 1963.
427 p. (MIRA 16:9)
(Metal cutting)









LIFSHITS, E.I.

ca

RECORDED AND INDEXED

30

The hazards of manufacturing goods from Thiokol, and means of protecting the worker. I. I. Lifshits. *Chemical and Rubber (U. S. S. R.)* 1938, No. 17, p. 107. The av. amt. of condensate after heating 1 kg. of Thiokol for 4 hrs. at 130-40° was 0.29 g. The volatile products liberated by Thiokol at this temp. had: (1) a narcotic action, paralyzing the liver, and to a slight extent the kidneys and heart, and (2) a strong irritating effect on the tear glands and bronchial passages. The max. proportion of Thiokol volatile products in the air should not exceed 0.003-0.004 mg. per l. Prophylactic measures to improve and standardize Thiokol and to improve working conditions are described. A. Pestoff

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

LIFSCHITZ, I. I.

LYKHTNA, E. T., ERENSBURG, G. S., KRASNOGORSKAIA, N. N., LIFSCHITZ, I. I.

Gravimetric and quantitative methods of determination of dust in
industry. Gig. sanit., Moskva No. 7, July 50. p. 3-5

1. Of the Aerosol Laboratory, State Scientific-Research Institute of
Labor Hygiene and Occupational Diseases in Leningrad.

CLML 19, 5, Nov., 1950

LIFSHITS, I.I.; KOVARSKAYA, N.Ye.

Method of determining fibrous dust in the air by Kouzov's dust
extractor. Gig. i san. 21 no.9:92-93 S '56. (MIRA 9:10)

1. Iz promyshlennogo otdeleniya laboratorii sanitarno-epidemiologicheskoy stantsii Nevskogo rayona Leningrada.
(AIR--POLUTION) (DUST)

KOGAN, A.G., promyshlenno-sanitarnyy vrach., LIFSHITS, I.I., khimik

Role silicon dioxide condensate aerosol in the development of
silicosis. Gig. i san. 23 no.8:63-66 Ag '58 (MIRA 11:9)

1. Iz sanitarno-epidemiologicheskoy stantsii Nevskogo rayona
Leningrada.

(SILICOSIS,
causes & frequency in indust. (Rus))

L 26377-66

ACC NR: AP6007660

(A)

SOURCE CODE: UR/OL13/66/000/003/0028/0028

AUTHORS: Barenboym, I. Yu.; Dubrova, Ye. P.; Vasil'yev, V. D.; Larik, N. M.; Radzevich, Ye. N.; Spitkovskiy, S. A.; Fuks, G. B.; Fel'dman, M. B.; Leybman, Ya. M.; Kolomoytsev, B. B.; Flaks, V. A.; Khandzhi, V. V.; Gol'dfel'd, L. M.; Lifshits, I. I.

10
B

ORG: none

TITLE: A means of erecting railroad bridges of arched-span construction from separate sections. Class 19, No. 178393

SOURCE: Izobreteniya, promyshlennyye obratstsy, tovarnyye znaki, no. 3, 1966, 28

TOPIC TAGS: bridge, bridge construction, structural engineering, railroad bridge, cantilever bridge

ABSTRACT: This Author Certificate presents a means for erecting railroad bridges of arched span construction from separate sections. The sections are suspended and joined with struts of the structure above the arch by temporary sloping and horizontal members. These members serve as cross-stays and upper booms. The sections also feature a cantilever truss (see Fig. 1) with a triangular framing, the lower girder of which forms a semi-arch. The upper girder of the cantilever truss is set above the travel span, which includes separate elements of the truss used in mounting and elevating the structure. These members subsequently form a triangular cantilever

UDC: 624.624

Card 1/2

NO. A8105700
FIG. 1.
1 - upper string of the cantilever
truss; 2 - struts; 3 - slanting members;
4 - lower string panels; 5 - anchor point;
6 - key block; 7 - floor plates; 8 - cables;
9 - anchor block; 10 - tension cables;
11 - joints.

from the stay and semi-arch sections. Each panel thus formed serves as a support for the next panel. The panels are rigidly fastened along the entire face, the process being repeated until the entire semi-arch is formed. Then cables are placed between the link sections and the support. When the cables are tightened, the cables are rotated with respect to the support section, thus unloading the vertical and horizontal members of the cantilever. The cables are removed, after which the deck-span plates are placed upon the structure above the arch between the sections of the semi-arch and the support. When the wearing surface is finally laid, the remaining part of the cables is tightened. Favorable working conditions for the support are created by freeing the support from one-sided loading, the addition being a cantilever addition. The abutment portion of the semi-arch is supported in place between the first support block of the semi-arch and the pier. Stresses in members of the cantilever are lessened by the introduction of stiffener plates in the upper girder at $1/2-2/3$ of its design length. Moments in panels on the arch span are reduced through a skewed arrangement of axes of diagonals relative to the axis of intersection of the axes of vertical members and the semi-arch blocks. Joints are placed between adjacent semi-arches on the assembled panels, thus indicating the position of cantilever frames in the span. Orig. art. has: 1 figure.

13/ SUEI DATE: 14May64

LIFSHITS, I. M.

"Use of Pyoctanin for Treating Malignant Tuberculosis
of the Skin," Prob. Tuber., No. 3, 1948. Cand.
Med. Sci., Chair Skin and Venereal Diseases, Kazan
State Inst. Advanced Training for Physicians im. Lenin,
-cl948-.

LIFSHITS, I. M.

Lifshits, I. M. "On the problem of the interrelationship of two infectious processes (neurolapine and cellular spirochetosis) in porpoises," Trudy Kozansk. gos. in-ta usovetshenstvovaniya vrachey im. Lenina, Vol. XI, 1949, (On cover: 1948), p. 216-31.

SO: U-3736, 21 May 53, (Letopis 'Zhurnal 'nykh Statey, No. 17, 1949).

LIVSHITS, I.M., kand.med.nauk

Familial form of Bitter's exfoliative dermatitis. Kaz.med.zhur.
41 no.1:96-97 Ja-F '60. (MIRA 13:6)

1. Iz gorodskogo kozhno-venerologicheskogo dispansera Kazani
(glavvrach - M.N. Petukhov, nauchnyy rukovoditel' - prof. Ya.
D. Pechnikov).
(SKIN--DISEASES)

24.7700

41128
S/056/62/043/004/044/061
B125/B186

AUTHORS: Lifshits, I. M., Azbel', M. Ya., Slutskin, A. A.

TITLE: The theory of quantum cyclotron resonance in metals

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43,
no. 4(10), 1962, 1464-1478

TEXT: A theory of quantum cyclotron resonance in metals is constructed. The total current density is $\vec{j} = \vec{j}_1 + \vec{j}_2$. \vec{j}_1 is caused by the electrons colliding with the surface, \vec{j}_2 by the non-colliding electrons. The difference between the quantum and classical formulas of the first order with respect to $\hbar\omega/\xi$. The quantum expression

$$j_2 = \frac{2e^2 H_0}{\hbar c} \sum_{n, l} \int_{-\infty}^{\infty} dp_z \frac{f_0(\epsilon_{n+l, p_z}) - f_0(\epsilon_{n, p_z})}{\epsilon_{n+l, p_z} - \epsilon_{n, p_z}} \frac{A_l(y, p_z)}{T^2(-i\omega + il\Omega + 1/\tau)}, \quad (2.4) \quad (2.4)$$

$$A_l(y, p_z) = \int_0^T dt v(t) u(y - r(t) - r_0) e^{-il\Omega t} \int_0^T dt' e^{il\Omega t'} v(t') E \left(y - \int_r^t v_t dt' \right).$$

Card 1/4

S/056/62/043/004/044/061
B125/B186

The theory of quantum cyclotron ...

for j_2 gives

$$j_2 = j_2^{xx}(y) + \frac{e^2 H_0 \omega A(y, \omega/H_0)}{2i\hbar^2 c\tau^3 (\partial\Omega/\partial p_x)_S} \left(\ln \frac{\sin \pi n_2}{\sin \pi n_1} - \pi i x \operatorname{sign} \left(\frac{\partial S}{\partial \Omega} \right)_{\epsilon=\zeta} \right), \quad (2.5)$$

$$n_2 = n_1 - x, \quad n_1 = \frac{cS(\omega/H)}{e\hbar H} - \frac{i c (\partial S / \partial \Omega)_{\epsilon=\zeta}}{e\hbar H \tau}, \quad x = \frac{(\partial \Omega / \partial p_x)_S}{(\partial \Omega / \partial p_x)_\epsilon}.$$

for $\lambda = 1$. $T = 2\pi/\Omega(n, p_z)$, $u(x) = 0$ when $x < 0$ and $u(x) = 1$ when $x > 0$.

f_0 denotes the Fermi distribution function, \vec{v} the particle velocity, $r(t)$ the y coordinate of the particle measured from the orbit center, and r_0 half the diameter of the electron orbit in the coordinate space. The expression

$$j_m^{xx}(k) = \frac{1}{k} \sum_{n=1}^{\infty} A_{mn} g_n(k), \quad (2.6)$$

$$j_m^{xx}(k) = \frac{\lambda}{k} \sum_{n=1}^{\infty} B_{mn} g_n(k), \quad \lambda = \ln \frac{\sin \pi n_2}{\sin \pi n_1} - \pi i x \operatorname{sign} \left(\frac{\partial S}{\partial \Omega} \right)_{\epsilon=\zeta}.$$

Card 2/4

S/056/62/043/004/044/061
B125/B186

The theory of quantum cyclotron ...

for the surface impedance is rather a complicated function of λ . If the temperature is low enough and the relaxation times long enough, logarithmic quantum resonance occurs with a discrete frequency spectrum and with giant oscillations of the high frequency characteristics. These oscillations are periodic with respect to the inverse magnetic field. Their period differs from that of Einstein-de Haas-van Alfvén type oscillations. They afford evidence for the resonance at the discrete frequencies which occur as a result of the effective mass quantization in a strong magnetic field. Metals obey a complex dispersion law. The attenuation of the oscillation with increasing temperature is characterized by $\beta_0 = 2\pi^2 kT (\partial S / \partial \epsilon)_{\Omega}^{-1}$. When $\beta_0 \gg 1$, these oscillations are proportional to $\exp(-\beta_0)$. Quantum resonance oscillations occur when $\beta_0 \sim 2\pi^2 kT / \hbar\omega \lesssim 1$. The vanishing of $(\partial S / \partial \Omega)_{\epsilon=f}$ at certain frequencies Ω (singular cross sections) facilitates the occurrence of quantum resonance oscillations. ω can also lie near to one of the extremum frequencies of the Fermi surface, and the cyclotron resonance for the central cross section then differs greatly from the other cross sections of extremum frequency cross

'Card' 3/4

The theory of quantum cyclotron ...

S/056/62/043/004/044/061
B125/B186

sections. The quantum cyclotron resonance can be more easily observed near the singular cross sections mentioned.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet (Khar'kov State University). Fiziko-tehnicheskiy institut Akademii nauk Ukrainskoy SSR (Physicotechnical Institute of the Academy of Sciences of the Ukrainskaya SSR)

SUBMITTED: April 29, 1962

Card 4/4

s/056/63/044/004/034/044
B102/B186

AUTHOR: Lifshits, I. M.

TITLE: Contribution to the theory of diffusion-viscous flow in poly-crystalline bodies

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 44,
no. 4, 1963, 1349 - 1367

TEXT: The mechanism of diffusion-viscous flow, which is due to vacancy diffusion and becomes considerable only at high temperatures and small stresses, is analyzed. On the basis of the theory of deformations a quantitative theory is developed which is more general than the considerations laid down by Nobarro (Report on the Conference of the strength of solids, Phys. Soc. London, 1948, p. 75) or C. Herring (J. Appl. Phys. 21, 5, 1950), and describes high-temperature diffusion-viscous flow of polycrystalline bodies. The problem of the determination of the selfconsistent displacements and deformations of the grains and the diffusion problem are related with the determination of the "viscosity tensor", α_{iklm} , which characterizes shape and size of the grains and therefore the structural

Card 1/3

S/056/63/044/004/034/044
B102/B186

Contribution to the theory of...

anisotropy. It connects the stress tensor $p_{ik} - \bar{\sigma}_{ik}$ with the deformation tensor $V_{ik} = \frac{1}{2} \left(\frac{\partial V_i}{\partial x_k} + \frac{\partial V_k}{\partial x_i} \right)$: $p_{ik} = p_0 \delta_{ik} + \alpha_{iklm} V_{lm}$; $V_{ii} = 0$. The effect of slippage along the grain faces upon their motion and diffusion deformation is elucidated, since α_{iklm} also depends on slippage resistance. Apart from an exact formula for α_{iklm} one in first approximation is also given, which is shown to be applicable in most of the cases of interest. On the basis of this first-approximation formula several interpolation formulas are derived which can be used for investigating the general flow equations. The case of a parallelepipedal structure is discussed, and as an example the kinetics of the closing up of a spherical pore under pressure is considered. Effects related to the diffusion-viscous flow, such as the appearance of fluctuation nonuniform stresses in a single grain (stresses of second kind), variation of the elastic moduli during the flow, the intensity of surface diffusion along the grain interfaces are discussed. The determination of the boundary conditions and the limits of applicability of the theory are considered. There are 4 figures.

Card 2/3

s/056/63/044/004/034/044
B102/B186

Contribution to the theory of...

ASSOCIATION: Fiziko-tehnicheskiy institut Akademii nauk Ukrainskoy SSR.
(Physicotechnical Institute of the Academy of Sciences
Ukrainskaya SSR)

SUBMITTED: November 20, 1962

Card 3/3

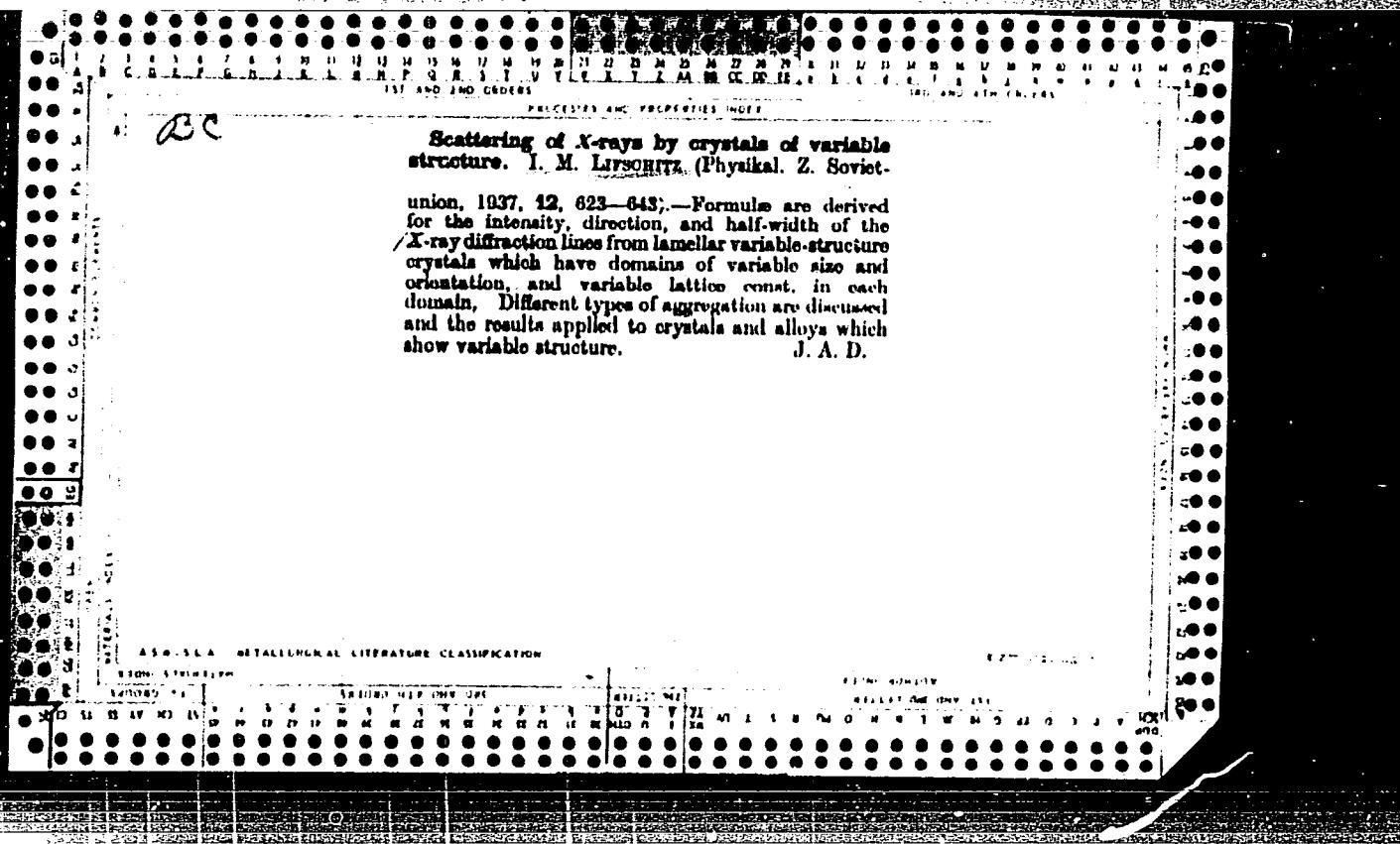
"APPROVED FOR RELEASE: 07/12/2001

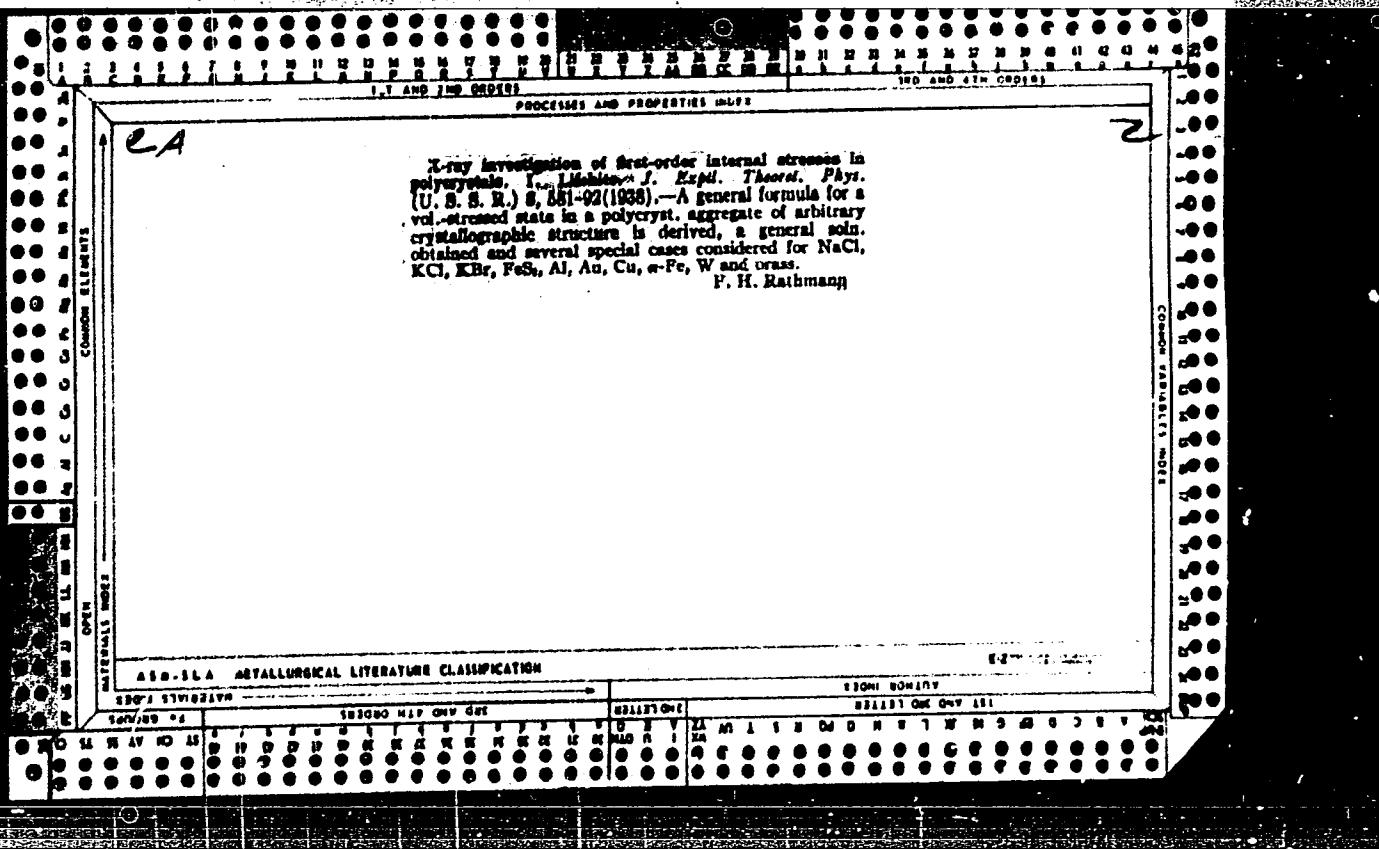
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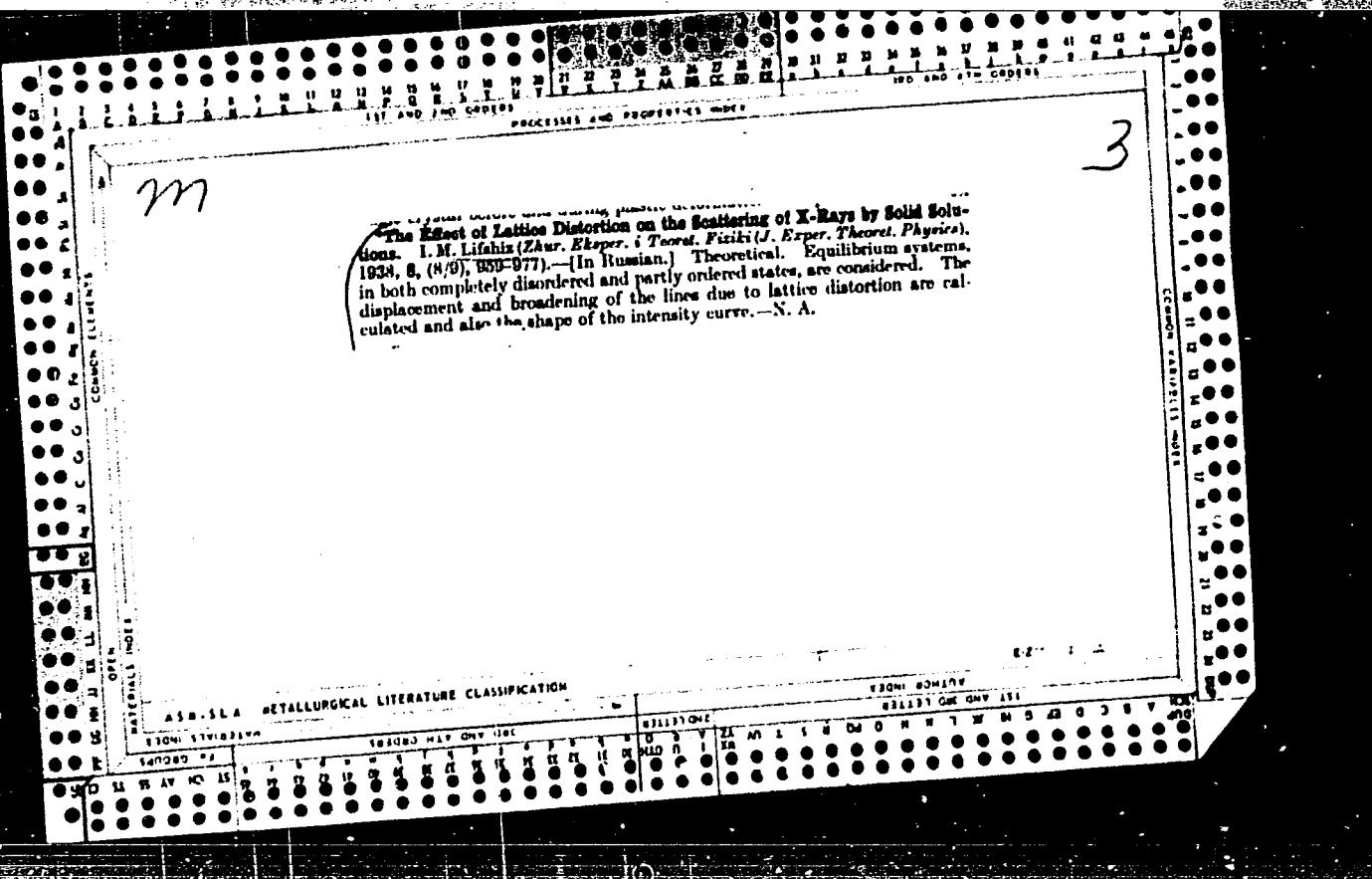
1937-1955

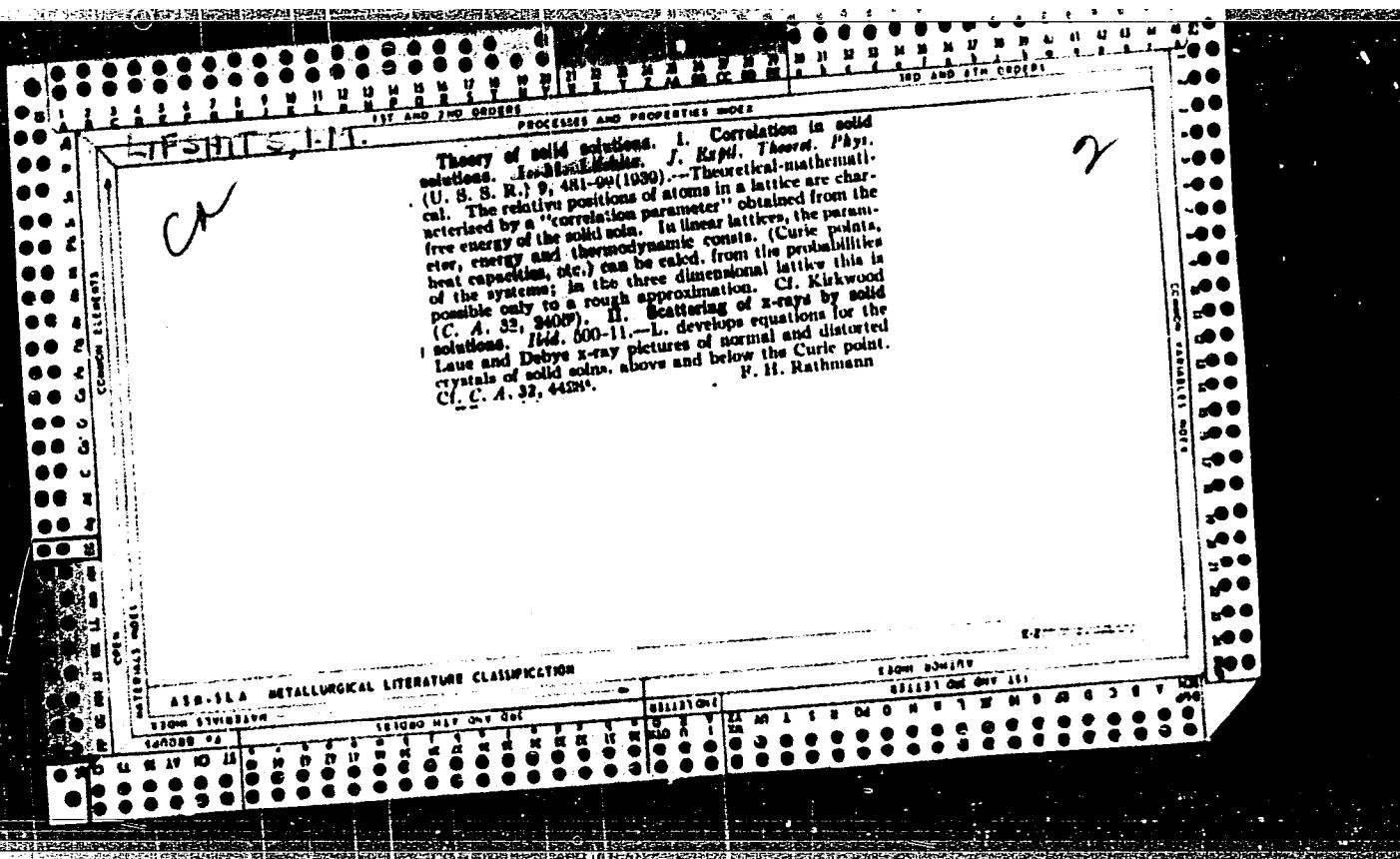
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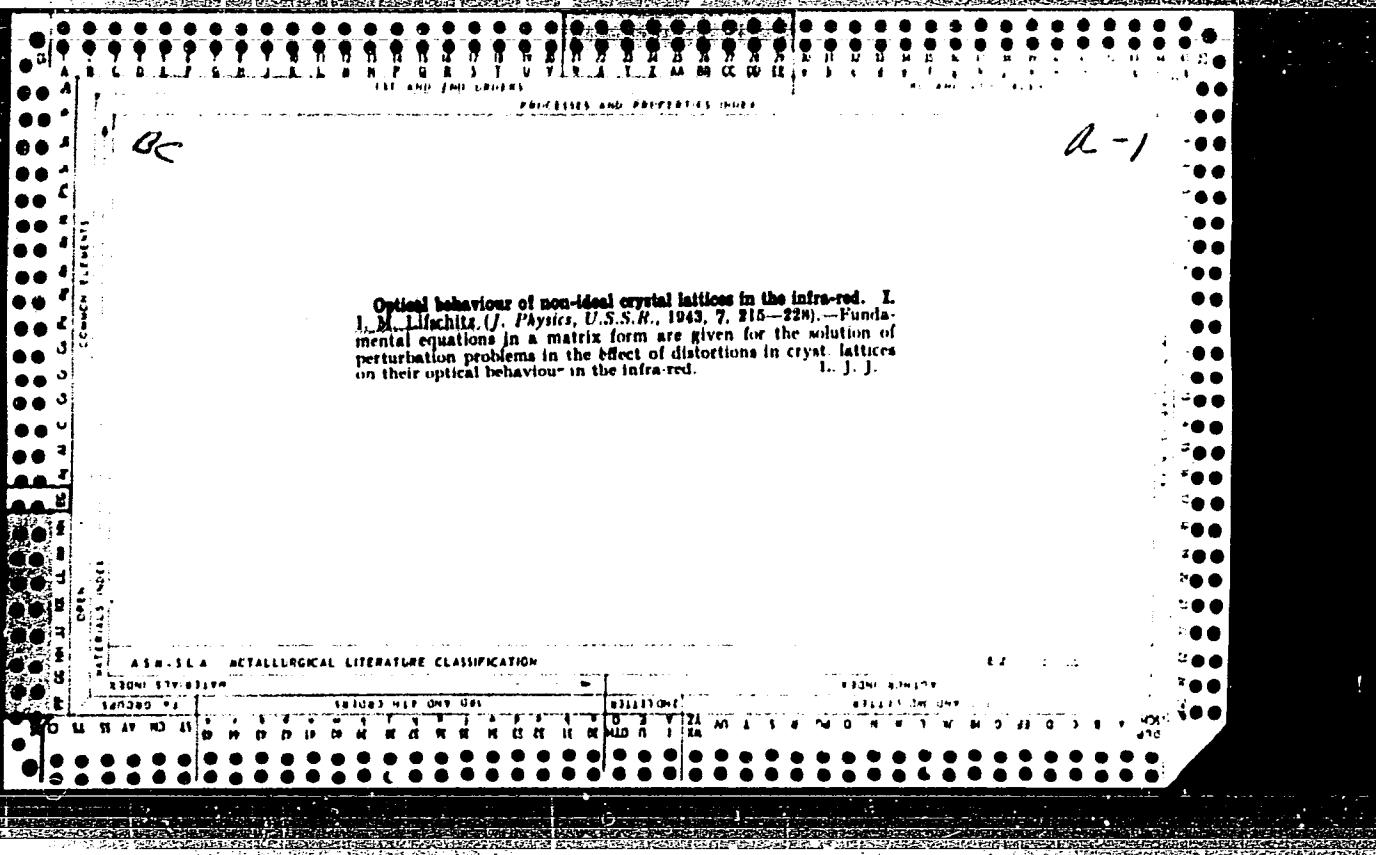


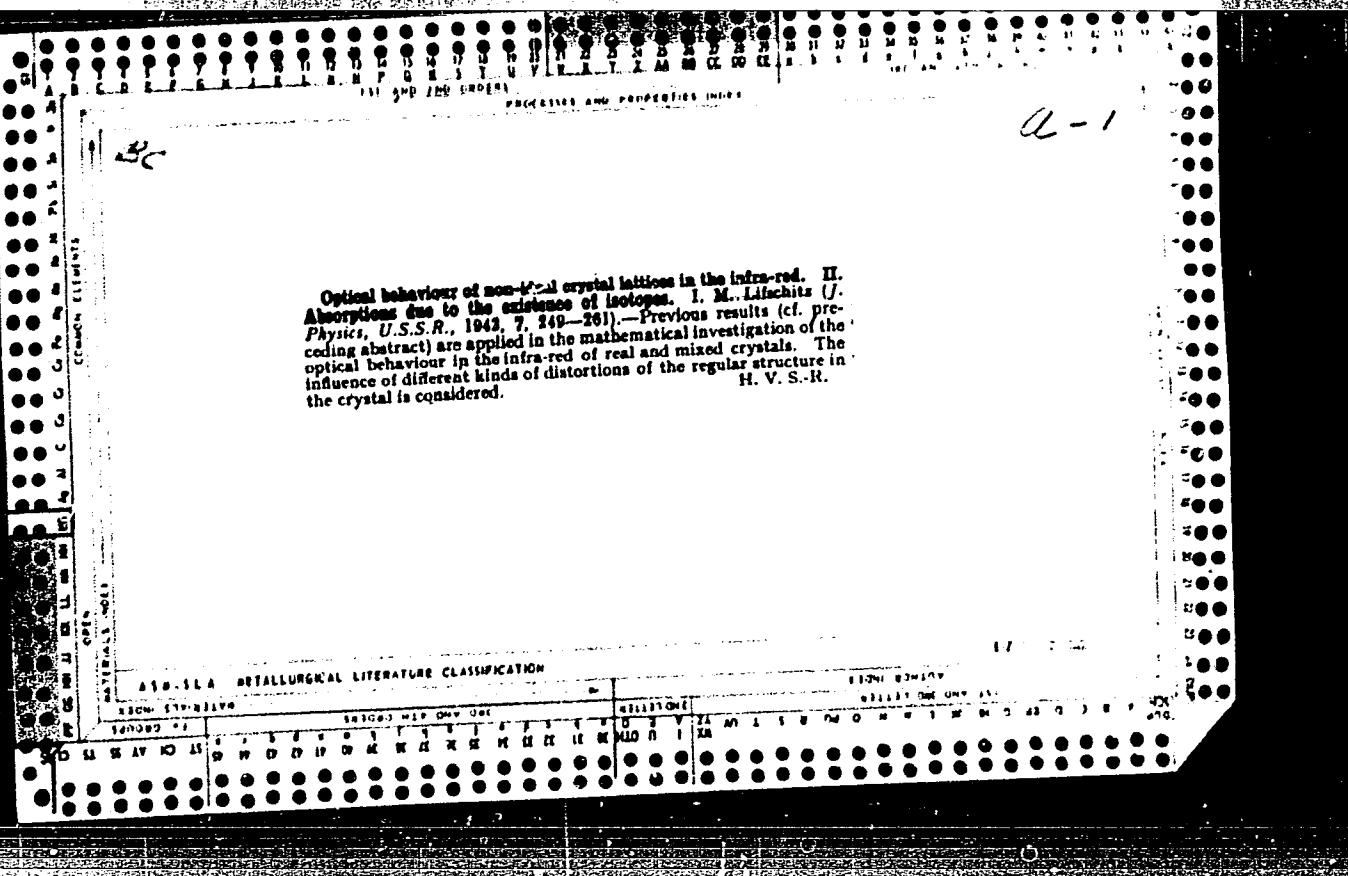
LIFSHITS, I.-M.

The theory of electric breakdown of ionic crystals.
A. Akhiezer and I. Lifshits. Compt. rend. acad. sci.
U. R. S. S. 27, 785-8 (1940) (in English); cf. C. A. 33,
8941. The theories proposed by Franklin and by Seeger
and Teller (loc. cit.) are based on von Hippel's idea that
breakdown sets in if the electrons, born in the conduction
zone and produced by ionization, are accelerated by the
field to such an extent as to become able to produce by
their turn ionization; Seeger and Teller postulate that
for breakdown all electrons must be accelerated by the
field and that the electron's motion is rectilinear, without
scattering. For the production of an avalanche process,
A. and L. consider it necessary that the majority of elec-
trons produced by ionization be accelerated by the field
and that, owing to the initially small energies of the
primary and secondary electrons, the probability of
ionization by the electrons is quite small and rises abruptly
at high energies. In any kinetic equation for breakdown
fields and the stationary soln. must vanish at breakdown
George Aver

P-60

Optical behaviour of non-ideal crystalline lattices in the infra-red.
I. Lifshitz (Compt. rend. Acad. Sci. U.R.S.S., 1941, 28, 37-39).—
A preliminary theoretical treatment of the influence of perturbations
in translational symmetry, such as those introduced by isotopic
atoms in a lattice, on optical properties in the infra-red is outlined.
General conclusions relating to absorption at different ν and changes
in resonance ν are stated.



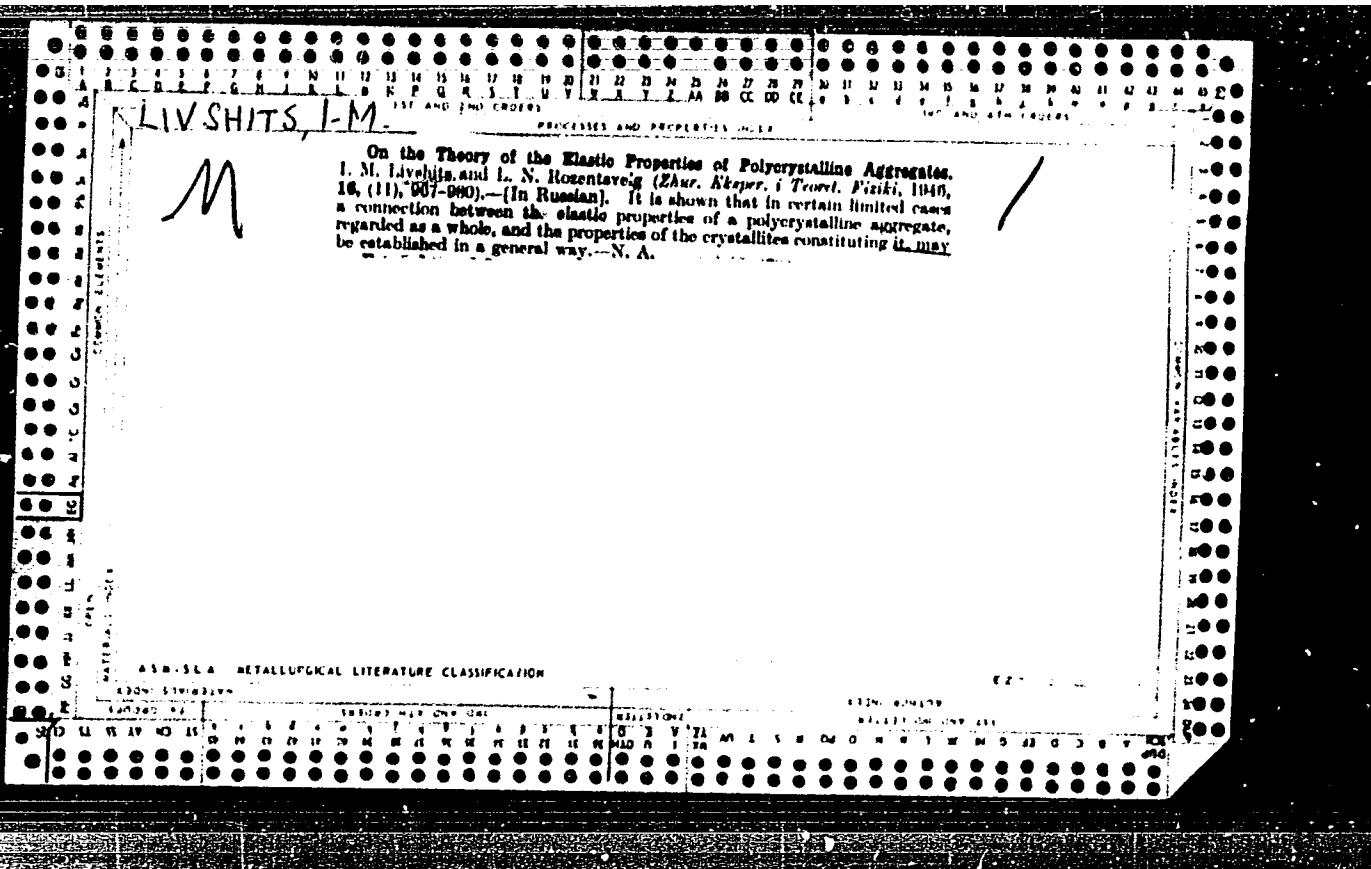


Fm 261

A. J. S. Bragg

Optical behaviour of non-ideal crystal lattices in the infra-red.
III. I. M. Lifschitz (*J. Physics U.S.S.R.*, 1944, **8**, 89-105; cf.
A., 1945, **1**, 10).—The solution of the canonical equation of small
admixtures of essentially alien atoms is considered, and from it
isomorphous mixed crystals are investigated. The appearance of
new resonance ν which lie far from the former intervals is discussed.
Possible generalisations of the theory, and the methods of averaging
and expansion used, are considered, and the methods compared with
perturbation theory.

H. V. S.-R.



PA 11T60

LIFSHITZ, I.

Jun 1947

USSR/X-rays - Diffusion
Photoelasticity

"Scattering of X-rays by Elastically Strained
Polycrystalline Bodies," I. Lifshitz, L. Rosenzweig,
7 pp

Mathematical discussion of photoelasticity. (To be
published in English in the Journal of Physics, 11,
No 4, 1947.)

11T60

3

cA

D. J. C. van der H.
Scattering of x-rays by elastically strained polycrystalline
substances I. M. Lifshits and L. N. Roreitsev (Acad.
Sci., U.S.S.R., Kharkov). *Zhur. Eksp. Teor. Fiz.* 17,
800-15 (1947); *J. Phys. (U.S.S.R.)* 11, No. 4 (1947) (in
English).—Theoretical. Stress fluctuations in separate
crystals are considered and equations are developed for the
line broadening in terms of the strain tensor. The com-
ponents of the strain tensor are formulated in terms of the
components of the macroscopic strain tensor. A general
equation is given for the line displacement in terms of the
tensor representing the difference between the elastic co-
effs. for a single crystal and the av. values for a polycrys-
talline material. Simple equations are given for cu. and hex-
agonal symmetry. Equations are also set up for the line
broadening in the cu. system under uniform compression.
The assumptions require relatively small anisotropy in the
single crystals and isotropic distribution of the crystals.
Simple equations are given for lines in terms of the camera
parameters. M. I. Senko

LIFSHITS, I. M.

PA 26T33

USSR/Mathematics - Analysis, Tensor
Elasticity

Sep 1947

"Setting up Green's Tensor for the Basic
Equation of the Theory of Elasticity for the
Case of an Absolute Elastic Anisotropic Media,"
I. M. Lifshits, I. N. Rozentsvayg, 9 pp

"Zhur Eksper i Teoret Fiz" Vol XVII, No 9

This article shows that setting up Green's
Tensor requires calculating roots of algebraic
equations of the sixth power. The authors
discuss the specific cases of cubic and hexagonal
crystals. In the case of hexagonal crystals,
Green's tensor is a closed construction. Calcula-
tions in the case of cubic crystals can
26T33

USSR/Mathematics - Analysis, Tensor Sep 1947
(Contd.)

be carried through to the end only in the event
of weak anisotropy. This article was submitted
at the Physical-Technical Institute, Academy
of Sciences of the USSR.

26T33

LIFSHITS, I.M.

Lifshits, I. M. On degenerate regular perturbations. I
Discrete spectrum. Akad. Nauk SSSR. Zhurnal Ekspert.
Theor. Fiz. 17, 1017-1024 (1947). (Russian)

Lifshits, I. M. On degenerate regular perturbations. II
Quasiboundaries and continuation spectrum. Akad. Nauk SSSR. Zhurnal Ekspert. Teoret. Fiz. 17, 1036-1039 (1947). (Russian)

Let (1) $(L - \lambda)v = 0$ be a non-perturbed problem, the characteristic values and functions being λ_1, v_1 , (L is a Hermitian operator). The problem is generally speaking to find the characteristic values and characteristic function λ_2, v_2 of the perturbed operator $L + \lambda A$ (A , a Hermitian operator, real arbitrary). (2) $(L + \lambda A - \lambda_1)v_1 = 0$. The usual studies have been focused on "small" (λ) the author is concerned with the contrary case. In a preceding paper [C. R. (Doladid) Akad. Sci. URSS (N.S.) 48, 79-81 (1945); these Rev. 7, 453] he solved (2) when the spectrum of L is discrete and A is "regular" in the sense that $\sum |\lambda_n|^2 < \infty$ (λ_n — matrix element of A in the system v_n). In part I he studies the case when A is "degenerate" in the sense this term has in the theory of integral equations; it is shown that (2) c. 1 then be treated on the basis of an algebraic system of a number of linear homogeneous equations. It is indicated how one may achieve the transition to regular non-degenerate A with the "degenerate" theory for the starting point and by a suitable limiting process; the results are of Fredholm type. In part II the author extends the results given in part I to the degenerate cases of quasi-continuum and continuous spectra; these cases are applicable to a number of specific physical problems.

S. M.

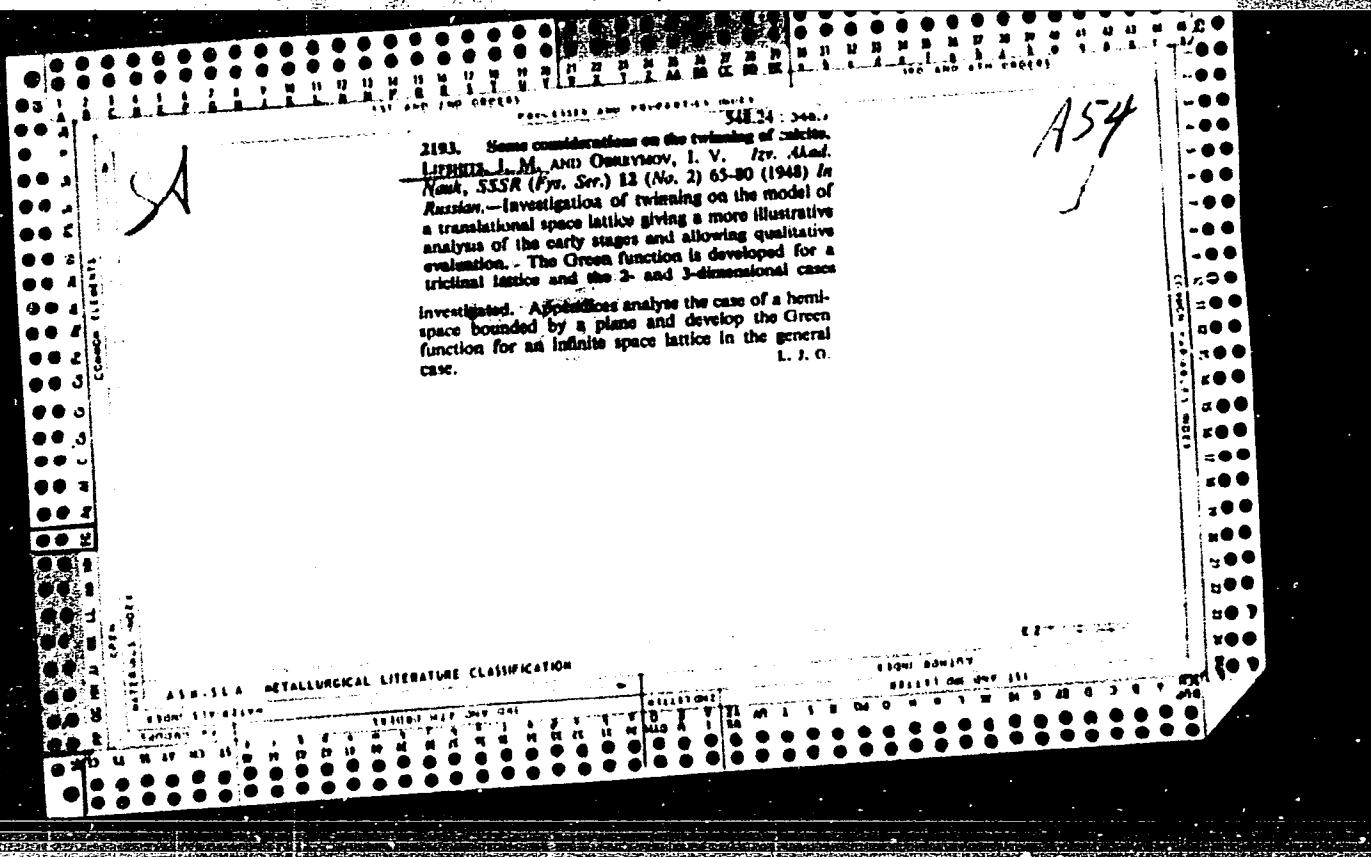
Source: Mathematical Reviews.

Vol 9 No. 9

LIFSHITS, I. M.

42052: LIFSHITS, I. M., ROZENTSVEYG, L. N. - Vliyanie poverkhnosti na infrektsionnye.
Spektry kristallov. Kratkoе soderzhanie Dokladov. Izvesiya Akad. nauk SSSR,
Seriya Fiz., 1948, No 5, s. 667

SO: Letopis' Zhurnal'nykh Statey, Vol. 47, 1948



LIFSHITS, I.-M.

PA 19/49T81

USSR/Physics
Crystals
Spectra, Infrared

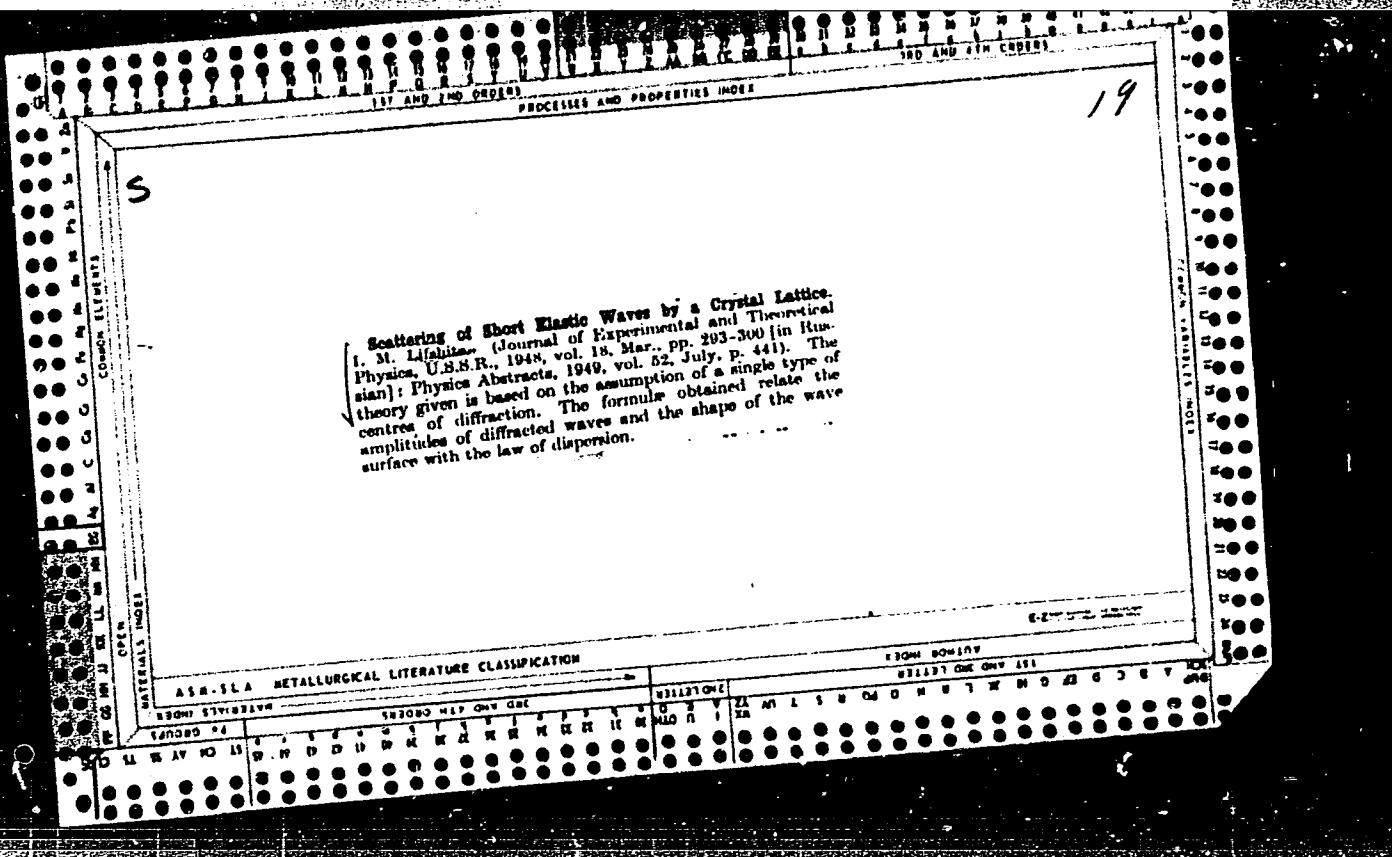
Sep/Oct 48

"The Influence of Surface on the Infrared Spectra of Crystals," I. M. Lifshits, L. N. Rozentsveig, Physicotech Inst, Acad Sci Ukrainian SSR, 1 p

"Iz Ak Nauk SSSR, Ser Fiz" Vol XIII, No 5

Gives synopsis of theoretical discussion.

19/49T81



111

3

Dynamics of a Semi-Infinite Crystal Lattice. I. M. Lifshits
and L. N. Rozentsveig (*Zhur. Fizich. Polya*, *Fizika Povrch.*,
18, (1), 1012-1022). [In Russian]. The general Born-Karman theory of the characteristic frequency spectrum for an infinite crystal lattice is adapted for a lattice with one free surface, by means of a regular perturbation method previously published by Leibler, 1947, **17**, 1013, 1056. Formulae are obtained, giving the dispersion law and the form of surface waves in the lattice. Apart from the surface waves which pass over to the usual Rayleigh waves in the limiting case of a continuum, there are surface waves in a complex crystal lattice, connected with the "optical" branch of the Born-Karman spectrum, which should give rise to additional lines in the infrared and Raman spectra of powders or distorted crystals. The discrete electron energy levels associated with the free surface of a metal (Shockley, *Phys. Rev.*, 1959, **114**, 53; 317; *M. L.*, 6, 66) can be deduced from a similar perturbation treatment.

I. G. H

LIFSHITS, I. M.

PA 25/49T107

USER/Physics
Crystals -- Twinning
Analysis, Macroscopic

Dec 48

"A Macroscopic Description of the Twining Phenomenon in Crystals," I. M. Lifshits,
Physicotech Inst., Acad. Sci. Ukrainian SSR,
Kharkov State U, 10 pp

"Zhur Eksp i Teoret Fiz" Vol XVIII, No 12

Attempts macroscopic description of subject phenomenon, caused by the nonlinear dependency between the intensity tensor π_{ik} and the deformation tensor u_{ik} . Considers consequences following from the requirement of mechanical and thermodynamic stability. Results obtained are supposed to give satisfactory explanation of most effects observed by Garber. Submitted 8 Jul 48.

25/49T107

"APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929910002-9

LIFSHITS, I. M.

Lifshits, I. M. - "On a macroscopic description of the phenomena of crystal twinning", Uchen. zapiski Mar'k. nos. uch. im. Gor'kovo, Vol. XXVII, Trudy Fiz. otd-niya Fiz.-mater. fak., Vol. I. 1948, P. 5-14, - Bibliog: 10 items.

SO: U-3042, 11 March 53, (letopis 'Zhurnal 'nykh Statey, No. 8, 1949).

APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929910002-9"

LIFSHITS, I. M.

Lifshits, I. M. and Parkhomovskiy, G. D. - "On the elastic properties of strongly textured polycrystals", Uchen. zapiski Khar'k. gos. un-ta im. Gor'kogo, Vol. XVII, Trudy Fiz. otd-niya Fiz.-matem. fak., Vol. I, 1948, p. 15-24.

SO: U-3042, 11 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 8, 1949).

LIFSHITS, I. M.

Lifshits, I. M. and Parkhomovskiy, G. D. - "Damping of ultra'igh frequency sound waves in polycrystals", Uchen. zapiski Khar'k. gos. un-ta im. Gor'kogo, Vol. XVII, Trudy Fiz. otd-niya Fiz.-matem. fak., Vol. I, 1948, p. 25-36.

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LIFSHITS, I. M.

PA 36/49T79

USSR/Physics

Magnetic Fields
Oscillations

Sep 48

"The Oscillation of Relativistic Particles in Strong Fields," I. M. Lifshits, Physicotech Inst, Acad Sci Ukrainian SSR, 4 pp

"Dok Ak Nauk SSSR," Vol LXII, No 3

Attempts to find the form of potential energy which will secure a given dependency of the period of oscillations of the particles upon their energy at relativistic speeds, in particular, to find the potential which will give

36/49T79

USSR/Physics (Contd)

Sep 48

isochronous oscillation for arbitrary energies.

Submitted by Acad S. L. Sobolev, 20 Jul 48.

36/49T79

LIFSHITS, I. M.

PA 156T93

USSR/Physics - Waves, Ultrasonic
Crystals, Elastic

Feb 50

"Propagation of Ultrasonic Waves in Polycrystals,"
I. M. Lifshits, G. D. Parkhomovskiy, Kharkov State U,
B pp

"Zhur Eksper i Teoret Fiz" Vol XX, No 2

Discusses attenuation due to wave dispersion in
nonhomogeneities. Proposes calculating macroscopic
coefficients of damping (absorption) by averaging
elasticity equations of a microscopically inhomogeneous
medium (polycrystal). Problem involves
macroscopic and dynamic moduli of elasticity, similar

156T93

USSR/Physics - Waves, Ultrasonic (Contd) Feb 50

to Lifshits and Ryzentsveig's "static moduli" in
"Zhur Eksper i Teoret Fiz" Vol XVI, 1946. The dynamic
moduli turn out to be complex. Coefficient
of absorption here involves imaginary part of dynamic
moduli and fourth power of frequency for wave length
greater than crystal dimensions, and second power
when less. Real part determines dispersion. Submitted
21 Aug 49.

156T93

LIFSHITS, I. M.

USSR/Physics - Helium

Aug 50

"Certain Properties of Solutions of He³ in He⁴, II. Displacement of the Lambda Point and Peculiarities of the Transfer Effect," B. N. Yesel'son, I. M. Lifshits, Physicotech Inst, Acad Sci Ukrainian SSR

"Zhur Eksper i Teoret Fiz" Vol XX, No 8, pp 748-759

Finds lowering of temperature of lambda-transition for solutions of He³ in He⁴ with concentration of He³ equal to 1.5% to equal 0.03° C in measurements. Finds and explains peculiarities of transfer effect in films of He II, in solutions with 1.5% and 0.03% [sic] He³. Submitted 21 Feb 50.

PA 165T111

LIFSHITS, I. M.

168T101

USSR/Physics - Superconductivity

Magnetic Field -

Sep 50

"Kinetics Governing the Disruption of Superconductivity by a Magnetic Field," I. M. Lifshits, Physicotech Inst, Acad Sci Ukrainian SSR

"Zhur Eksper i Teoret Fiz" Vol XX, No 9,
pp 834-841

Studies kinetics governing transition from superconducting state to normal state in external magnetic field exceeding critical. By considering that external field does not fluctuate too rapidly and does not exceed greatly

168T101

USSR/Physics - Superconductivity
(Contd) Sep 50

the critical value, one can assume the boundary moves without inertia and follows phenomenological theory. Solves system of equations of electrodynamics and thermoconductivity. Submitted 23 Apr 50.

168T101

Classify, Sanger

*SA
List. A*

539.3
6889. On the theory of elastic properties of poly-crystals. I. M. LIPSHITZ AND L. N. ROZENFELD. Letter in *Zh. Eksp. Teor. Fiz.*, 21, 1184 (No. 10, 1951) *In Russian*.

Owing to an error in sign in formula 41 of the authors' paper [*ibid.*, 16, 967 (1946)], expressions for the average "thermodynamic" and "macroscopic" moduli of elasticity were found to differ. Equations 12 and 13 should be omitted; the rest of the paper is unaffected.

A. GORUCH

(CA 47 no. 21:10938 '53)